

ANNEX X FIXED NUCLEAR FACILITIES

I. SITUATION AND ASSUMPTIONS

- A. With the abandonment of the Marble Hill Power Plant near Madison, Indiana and the Zimmer Plant at Moscow, Ohio, no nuclear power plants exist within 30 miles of the Commonwealth. Federal law requires planning for direct protection of the populace only if citizens live within 10 miles of the plant; therefore, no such planning is being done in Kentucky.
- B. The three nuclear power plants located along the Kentucky-Tennessee border in Tennessee at Hartsville, Oak Ridge and Surgoinsville have been placed in mothballs. Date to restart construction is unknown.
- C. There are no nuclear power plants in operation or under construction within 50 miles of Kentucky. Planning for protection of the food chain, as required by federal law, is not required beyond the 50-mile limit.
- D. The gaseous diffusion plants (GDPs) at Paducah, Kentucky and Portsmouth, Ohio are not considered fixed nuclear facilities under federal criteria. However, specialized response plans have been developed by the United States Enrichment Corporation (USEC), operator of the GDPs, and local and state officials for these facilities. The effects of an accident at these plants will be handled under Annex Q, Hazardous Materials.
- E. There is, therefore, no need to develop a Fixed Nuclear Facility Annex for Kentucky at this time. A draft plan for this contingency, titled - Kentucky Radiological Emergency Plan, does exist. This draft was developed for the Zimmer Plant.
- F. Response to an incident involving a transportation accident, in which radiological material is being transported, will be handled under the provisions of Annex Q, "Hazardous Materials".

II. APPENDICES

- X-1 Paducah Gaseous Diffusion Plant Event Classification

APPENDIX X-1
PADUCAH GASEOUS DIFFUSION PLANT
EVENT CLASSIFICATION, NOTIFICATION, AND EMERGENCY ACTION LEVELS

I. SITUATION AND ASSUMPTIONS

The Paducah Gaseous Diffusion Plant (PGDP) will respond to all emergency events at the plant site in accordance with the Emergency Plan (E-Plan) for the PGDP.

II. MISSION

To provide information on event classification, on-site and off-site notification, and emergency action levels that will be instituted by the PGDP to protect the citizens of Kentucky and lessen the environmental impact following any hazardous material release event from the PGDP.

III. DIRECTION AND CONTROL

The response to an emergency event at the PGDP facility will be managed in accordance with Incident Management System (IMS) procedures outlined in the PGDP E-Plan, in coordination with Annex Q, Hazardous Materials, of the Paducah-McCracken County Emergency Operations Plan (EOP) and the Commonwealth of Kentucky EOP.

IV. CONCEPT OF OPERATIONS

Under the IMS procedures of the PGDP E-Plan, the management and coordination of all response actions to an emergency event will be accomplished through activation and use of an on-scene Incident Command Post (ICP) and/or the plant Emergency Operations Center (EOC). From these sites, plant chief executives and department heads will gather to make decisions and initiate response activities to include, designating a specific event classification, making required or necessary notifications, and implementing protective actions associated with the proper emergency action level.

A. Event Response Levels.

At the PGDP, emergencies are serious hazardous material release events that require an increased alert status for on-site personnel and, in specified cases, for off-site authorities. The exact manner of response employed to manage an event will depend on the nature and severity of potential, real, or perceived consequences including potential adverse public or media reaction. Emergency Action Levels based on these criteria are shown in Tab X-1-1.

B. Event Classification.

To assist in the specific event classification and activation of the emergency response organization, emergencies may be classified as either an “Alert” or a “Site Area Emergency”. It is possible for two events to take place simultaneously with one classified as an alert, and one as a site emergency. Each alert and site area emergency will be announced separately when they are terminated.

1. Alert.

An ALERT is defined as an event that has led to, or could lead to, a release to the environment of radioactive or other hazardous material, but the release is not expected to require a response by an off-site response organization to protect persons off-site.

An ALERT reflects mobilization of the plant’s emergency response organization, but does not indicate an expectation of off-site consequences. However, an ALERT may require off-site response organizations to respond to an on-site condition such as fire.

2. Site Area Emergency.

A SITE AREA EMERGENCY is defined as an event that has led to, or could lead to, a significant release to the environment of radioactive or other hazardous material and that could require a response by an off-site organization to protect persons off-site.

A SITE AREA EMERGENCY reflects full mobilization of the plant’s emergency response organization and may result in requests for off-site organizations to respond to the plant site.

C. Notification Methods.

This section describes the methods used for notification of Paducah Gaseous Diffusion Plant (PGDP) emergency response personnel and appropriate local, state, and federal emergency response centers. Actual methods and sequencing of notifications are covered in specific facility emergency response plan implementing procedures. Tab X-1-2 is an example of the form used for off-site notifications.

1. Notification of PGDP Personnel.

The PGDP plant shift superintendent (PSS), as incident commander, is responsible for classifying an event in the appropriate emergency category and then notifying plant personnel as needed. This notification could involve sounding the appropriate facility alarm signal, making announcements over the plant radio systems and public address system, or utilizing the plant telephone system. The present means for notification of on-site personnel

within PGDP is the plant emergency alarm system consisting of several distinct alarms and the use of a public address system.

Visitors within PGDP property are assigned an escort. This escort is responsible for informing the visitors of emergencies when they occur and for taking action as necessary. Each visitor must attend the visitor's orientation briefing, which includes emergency information, and receive a card certifying qualification before being permitted to enter the plant.

PGDP and contractor personnel are trained on actions to be taken in an emergency prior to their work assignments. Otherwise, they must be escorted by an individual who has been trained in emergency response procedures. The training includes instructions on methods of notification and the required actions in the event of an emergency.

2. Notification of State and Local Personnel.

The PSS, or designee, will promptly notify the director of the Paducah-McCracken County Office of Emergency Management, and the Kentucky Division of Emergency Management (KyEM) duty officer when required. These notifications will occur as soon as possible, but not more than 15 minutes after an event is declared an alert or site area emergency. The specifics of this notification process are outlined in the appropriate implementing procedure.

NOTE: An emergency should be categorized as soon as possible. The PSS shall not delay categorization of an event to allow activation of the EOC if information is available that indicates an emergency condition exists. The crisis manager may recommend categories be reclassified or terminated. The recommendation to terminate an emergency category shall be reviewed with the Paducah-McCracken County Office of Emergency Management and KyEM before being implemented.

3. Notification of U.S. Nuclear Regulatory Commission (NRC) Headquarters (HQ).

The PSS, or designee, will promptly notify the NRC-HQ Operations Center, which is staffed by the duty officer. For events classified as "alerts" or "site area emergencies" the PSS, or designee, will notify the NRC duty officer as soon as possible but no later than one hour after the event has been declared an alert or site area emergency.

4. Notification of U.S. Department of Energy Oak Ridge (OR) EOC.

The PSS, or designee, will promptly notify the DOE OR 24-hour EOC, which is staffed by the OR duty officer. For events or situations classified as "alerts" or "site area emergencies" the PSS will notify the OR duty officer within 15 minutes from the time of classification.

5. Notification of the Public.

PGDP will provide appropriate off-site authorities with supporting information for public notification. A combination of the outdoor public warning siren system and the Emergency Alert System will be utilized for the the notification of the public. The public will be continuously updated on the situation via the PGDP Joint Public Information Center (JPIC) at the Information Age Park conference building.

D. Two-Mile Immediate Notification Area.

PGDP will recommend protective actions for the public within the two-mile immediate notification area (INA). Decision-making will be based on accident assessment. The primary protective action for the INA is sheltering-in-place. Sheltering-in-place is accomplished by going inside a building and reducing exposure to outside air. Tab X-1-3 shows the INA and outdoor warning sirens for alerting the general public.

The INA includes all off-site land within approximately two miles of the center of the plant. This zone is wholly within McCracken County. The INA provides for a graded response for those members of the general public most at risk. All persons in the INA are advised to shelter-in-place. People on the U.S. DOE reservation or West Kentucky Wildlife Management Area are advised to leave the area immediately.

V. REFERENCES

A. IO CFR 76.21 "Certification of Gaseous Diffusion Plants"

B. DOE Order 151.1 "Comprehensive Emergency Management System"

C. PGDP E-Plan as part of Application for NRC Certification.

VI. TABS

TAB X-1-1 Emergency Action Levels

TAB X-1-2 PGDP Emergency Notification Form

TAB X-1-3 PGDP Immediate Notification Areas

TAB X-1-1
EMERGENCY ACTION LEVELS

FIRE EVENT

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
1.0	Fire Event			
1.1	<p>Fire which cannot be controlled by the ERO within 15 minutes of the time of verification</p> <p style="text-align: center;">AND</p> <p>Potentially or actually compromising any system and/or process and/or equipment described in the hazardous chemical EALs or radiological EAL which if breached has the potential to result in reaching a hazardous chemical ALERT level</p> <p style="text-align: center;">BUT IS NOT</p> <p>Capable of releasing radiological or non-radiological hazardous material</p> <p>EQUAL TO OR GREATER THAN</p> <p>ERPG-2 Exposure levels off-site.</p> <p>Note: Refer to the radiological EAL or to the appropriate hazardous chemical EAL for specific system, process, and material information.</p>	ALERT	<p><u>On-site:</u></p> <p>Potential for injury to personnel.</p> <p>Potential for ERPG-2 exposure levels for involved hazardous material in immediate release area.</p> <p>Potential for uptake of uranium in affected area.</p> <p>Disruption of operations and/or activities in area of fire or release.</p> <p><u>Off-site:</u></p> <p>No effect.</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building. 2) Account for personnel in the evacuated area or building. 3) When safe, make an appropriate emergency response based on the hazards and/or conditions involved. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. 7) Identify exposed persons for medical evaluation and for bioassay, if necessary - contact radiological protection manager. 8) Consider the need for off-site assistance. <p>No off-site protective action recommendations required.</p>

FIRE EVENT (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
1.0	Fire Event (Continued)			
1.2	<p>Fire which cannot be controlled by the ERO within 15 minutes of the time of verification</p> <p style="text-align: center;">AND</p> <p>Potentially or actually Compromising any system and/or process and/or equipment described in the hazardous chemical EALs or radiological EAL which if breached has the potential to result in a radiological or non-radiological hazardous material release</p> <p>EQUAL TO OR GREATER THAN</p> <p>ERPG-2 Exposure levels both on-site and off-site.</p> <p>Note: Refer to the radiological EAL or to the appropriate hazardous chemical EAL for specific system, process, and material information.</p>	SITE AREA EMERGENCY	<p><u>On-site:</u></p> <p>Potential for injury to personnel.</p> <p>Chemical concentration exceeding ERPG-2 exposure levels in release area and downwind from site boundary.</p> <p>Potential for uptake of uranium in affected area.</p> <p>Disruption of operations and/or activities in area of fire or release.</p> <p><u>Off-site:</u></p> <p>ERPG-2 exposures beyond site boundary</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building for physical chemical and/or radiological hazards. 2) Evacuate downwind areas and/or buildings to the site boundary (reservation boundary) or shelter-in-place if evacuation cannot be performed in a timely manner. 3) Account for personnel in evacuated area or building. 4) When safe, make an appropriate emergency response based on the hazards and/or conditions involved. 5) Activate the Public Warning System including sirens and the EAS. 6) Issue required notifications to off-site authorities and Protective Action Recommendation (PARs). 7) Activate EOC. 8) Stage emergency responders in a safe location. 9) Identify exposed persons for medical evaluation and for bioassay. If necessary - contact radiological protection manager. 10) Consider the need for off-site assistance. <p>Off-site protective action recommendations required and Public Warning System activation required.</p>

EXPLOSION EVENT

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
2.0	Explosion Event			
2.1	<p>Explosion which has compromised any system and/or process and/or equipment described in the hazardous chemical EALs or radiological EAL which if breached has the potential to result in reaching a hazardous chemical and/or radiological ALERT level release</p> <p style="text-align: center;">BUT IS NOT</p> <p>capable of releasing radiological or non-radiological hazardous material</p> <p style="text-align: center;">EQUAL TO OR GREATER THAN</p> <p>ERPG-2 exposure levels off-site.</p> <p>Note: Refer to the radiological EAL or to the appropriate hazardous chemical EAL for specific system, process, and material information.</p>	ALERT	<p><u>On-site:</u></p> <p>Potential for injury to personnel.</p> <p>Potential for ERPG-2 exposure levels for involved hazardous material in immediate release area.</p> <p>Potential for uptake of uranium in affected area.</p> <p>Disruption of operations and/or activities in area of release.</p> <p><u>Off-site:</u></p> <p>No effect.</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building. 2) Account for personnel in the evacuated area or building. 3) When safe, make an appropriate emergency response based on the hazards and/or conditions involved. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. 7) Identify exposed persons for medical evaluation and for bioassay, if necessary - contact radiological protection manager. 8) Consider the need for off-site assistance. <p>No off-site protective action recommendations required.</p>

EXPLOSION EVENT (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
2.0	Explosion Event (Continued)			
2.2	<p>Explosion which has compromised any system and/or process and/or equipment described in the hazardous chemical EALs or radiological EAL which if breached has the potential to result in a radiological or non-radiological hazardous material release</p> <p>EQUAL TO OR GREATER THAN</p> <p>ERPG-2 exposure levels both on-site and off-site.</p> <p>Note: Refer to the radiological EAL or to the appropriate hazardous chemical EAL for specific system, process, and material information.</p>	SITE AREA EMERGENCY	<p><u>On-site:</u></p> <p>Potential for injury to personnel.</p> <p>Chemical concentration exceeding ERPG-2 exposure levels in release area and downwind from site boundary.</p> <p>Potential for uptake of uranium in affected area.</p> <p>Disruption of operations and/or activities in area of fire or release.</p> <p><u>Off-site:</u></p> <p>ERPG-2 exposures beyond site boundary</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building for physical chemical and/or radiological hazards. 2) Evacuate downwind areas and/or buildings to the site boundary (reservation boundary) or shelter-in-place if evacuation cannot be performed in a timely manner. 3) Account for personnel in evacuated area or building. 4) When safe, make an appropriate emergency response based on the hazards and/or conditions involved. 5) Activate the Public Warning System including sirens and the EAS. 6) Issue required notifications to off-site authorities and Protective Action Recommendation (PARs). 7) Activate EOC. 8) Stage emergency responders in a safe location. 9) Identify exposed persons for medical evaluation and for bioassay. If necessary - contact radiological protection manager. 10) Consider the need for off-site assistance. <p>Off-site protective action recommendations required and Public Warning System activation required.</p>

NATURAL PHENOMENON EVENT

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
3.0	Natural Phenomenon Event			
3.1	Earthquake verified by substantial ground shaking causing two or more seismic switch alarms (refer to CP2-EP5045).	ALERT	<u>On-site:</u> Potential for injury to personnel.	1) When safe, evaluate plant systems and areas and establish an initial isolation zone for the affected areas or buildings with hazardous materials releases.
3.2	Tornado within protected area OR sighted and believed that protected area impact is imminent.		Potential for ERPG-2 exposure levels for involved hazardous material in immediate release area.	2) Account for personnel in evacuated area or building. 3) When safe, make an appropriate emergency response based on the hazards and/or conditions involved.
3.3	Winds consistently exceeding 70 mph for more than 15 minutes as measured on site. Note: Refer to the radiological EAL or to the appropriate hazardous chemical EAL for specific system, process, and material information.		Potential for uptake of uranium in affected area. Disruption of operations and/or activities in area of release. Potential for multiple damage sites. Assistance from off-site may not be available. <u>Off-site:</u> No effect.	4) Activate EOC 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. 7) Consider the need for off-site assistance. 8) Identify exposed persons for medical evaluation and for bioassay, if necessary - contact radiological protection manager No off-site protective action recommendations required.

SECURITY EVENT

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
4.0	Security Event			
4.1	<p>Security event in the protected area ongoing for greater than 15 minutes requiring on-site personnel protective measures.</p> <p>Note: Hostage-taking, extortion, credible bomb threat, credible threat of violence (civil disturbance) perpetrated by either an on-site employee(s) or an outside intruder(s) who is deemed to be armed and dangerous.</p>	ALERT	<p><u>On-site:</u></p> <p>Potential for injury to personnel.</p> <p>Potential for fire and/or explosion.</p> <p>Potential for ERPG-2 exposure levels for involved hazardous material in immediate release area.</p> <p>Potential for uptake of uranium in affected area.</p> <p>Disruption of operations and/or activities in area of release.</p> <p><u>Off-site:</u></p> <p>ERPG-2 exposures beyond site boundary</p>	<p>1) Establish an initial isolation zone for the affected area or building.</p> <p>2) Account for personnel in evacuated area or building.</p> <p>3) Mobilize Police Operations.</p> <p>4) When safe, make an appropriate emergency response based on the hazards and/or conditions involved.</p> <p>5) If safe, activate EOC</p> <p>Caution: Activation of the EOC may expose personnel to the hazards and/or conditions.</p> <p>6) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind.</p> <p>7) Notify off-site authorities.</p> <p>8) Consider the need for off-site assistance.</p> <p>9) Identify exposed persons for medical evaluation and for bioassay, if necessary - contact radiological protection manager.</p> <p>No off-site protective action recommendations required.</p>

SECURITY EVENT (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
4.0	Security Event			
4.2	A direct significant credible near term security threat communicated by local, state, or federal law enforcement, homeland security, emergency management agencies or other legitimate agencies or persons.	ALERT	<p><u>On-site:</u></p> <p>Potential for injury to personnel.</p> <p>Potential for fire and/or explosion.</p> <p>Potential for ERPG-2 exposure levels for involved hazardous material in immediate release area.</p> <p>Potential for uptake of uranium in affected area.</p> <p>Disruption of operations and/or activities in area of release.</p> <p><u>Off-site:</u></p> <p>No effect.</p>	<p>1) Mobilize Protective Force.</p> <p>If Safe, activate EOC.</p> <p>2) Caution: Activation of the EOC may expose personnel to the hazards and/or conditions.</p> <p>3) Notify off-site authorities.</p> <p>4) Consider the need for off-site assistance.</p> <p>5) Maintain communication with the appropriate local, state, federal, and/or other legitimate agencies or persons.</p> <p>No off-site protective action recommendations required.</p>

SECURITY EVENT (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
4.0	Security Event (Continued)			
4.3	<p>Security event with an imminent or actual loss of physical control of facilities containing systems and/or plant processes and/or equipment that has the potential to result in a radiological or non-radiological hazardous material release.</p> <p>EQUAL TO OR GREATER THAN</p> <p>ERPG-2 exposure levels both on-site and off-site.</p> <p>Example: Terrorist takeover of a facility or an armed assault within the protected area.</p> <p>Note: Refer to the radiological EAL or to the appropriate hazardous chemical EAL for specific system, process, and material information.</p>	SITE AREA EMERGENCY	<p><u>On-site:</u></p> <p>Potential for injury to personnel.</p> <p>Potential for fire and/or explosion with chemical concentration exceeding ERPG-2 exposure levels in release area and downwind from site boundary.</p> <p>Potential for uptake of uranium in affected area.</p> <p>Disruption of operations and/or activities in area of release.</p> <p><u>Off-site:</u></p> <p>>ERPG-2 exposures beyond site boundary.</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building. 2) Evacuate downwind areas and/or buildings to the site boundary (reservation boundary) or shelter-in-place if evacuation cannot be performed in a timely manner. 3) Account for personnel in evacuated area or building 4) When safe, make an appropriate emergency response based on the hazards and/or conditions involved. 5) Activate the Public Warning System including sirens and the EAS. 6) Issue required notifications to off-site authorities and PARs. Activate EOC. 7) Mobilize Police Operations 8) If safe, activate EOC Caution: Activation of the EOC may expose personnel to the hazard. 9) Stage emergency responders in a safe location. 10) Consider the need for off-site assistance. 11) Identify exposed persons for medical evaluation and for bioassay. If necessary - contact radiological protection manager. <p>Off-site protective action recommendations required and Public Warning System activation required.</p>

ELECTRICAL POWER LOSS EVENT

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
5.0	Electrical Power Loss Event			
	Total loss of off-site power for more than 15 minutes.	ALERT	<u>On-site:</u> Disruption of operations and/or activities in area of release. Compromise of plan systems. <u>Off-site:</u> No effect	1) Activate EOC 2) Notify off-site authorities 3) Evaluate plant systems for safety concerns. 4) Mobilize personnel for restoring power on safe shutdown of plan systems. No off-site protective action recommendations required.

HAZARDOUS CHEMICAL EVENT – FLUORINE (F₂)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
6.0	Fluorine (F₂)			
6.1	<p>Leakage or rupture of a 4.9 lb cylinder occurring anywhere on site,</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 600 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 2 ppm F₂ at a distance of 600 ft. downwind.</p>	ALERT	<p><u>On-site:</u></p> <p>ERPG-2 exposure levels (7.5 ppm) in immediate release area.</p> <p>Disruption of operations and/or activities in area of release.</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 600 ft. (radial distance from release point). 2) Account for personnel in evacuated area or building. 3) Make a hazardous materials response. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. 7) Identify exposed persons for medical evaluation. <p>No off-site protective action recommendations required.</p>
6.2	<p>Leak (not rupture) of pipeline or transfer line,</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 600 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 2 ppm F₂ at a distance of 600 ft. downwind.</p> <p>(Additional F₂ EALs on next page)</p>	ALERT	<p><u>Off-site:</u></p> <p>No effect</p>	

HAZARDOUS CHEMICAL EVENT – FLUORINE (F₂)(Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
6.0	Fluorine (F₂)			
6.3	Rupture and/or break of storage tank pipeline or process building pipeline	SITE AREA EMERGENCY	<p><u>On-site:</u></p> <p>F₂ concentration exceeding ERPG-2 (7.5 ppm) exposure levels in release area and downwind to site boundary.</p> <p>Disruption of operations/ activities in large portion of plant.</p> <p><u>Off-site:</u></p> <p>>ERPG-2 exposures beyond site boundary</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 600 ft. (radial distance from release point). 2) Evacuate downwind areas and/or buildings to the site boundary (reservation boundary) or shelter-in-place if evacuation cannot be performed in a safe and timely manner. 3) Account for personnel in evacuated area and/or or building(s). 4) Activate the Public Warning System including sirens and the EAS. 5) Issue required notifications and protective action recommendations (PARs). 6) Activate EOC. 7) Make a hazardous materials response. 8) Identify exposed and/or injured persons for medical evaluation. <p>Off-site protective action recommendations and Public Warning Siren activation are required.</p>
6.4	Rupture of storage tank in C-410-D or C-350	SITE AREA EMERGENCY		

HAZARDOUS CHEMICAL EVENT – CHLORINE TRIFLUORIDE (ClF₃)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
7.0	Chlorine Trifluoride (ClF₃)			
7.1	<p>160 lb cylinder rupture anywhere on-site,</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 800 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 3 ppm HF or ≥ 1 ppm Cl₂ or ≥ 2 ppm F₂ at a distance of 800 ft. downwind.</p>	ALERT	<p><u>On-site:</u></p> <p>ClF₃ ERPG-2 exposure levels (1 ppm) in immediate release area.</p> <p>ClF₃ Hydrolysis products (HF and Cl₂).</p> <p>Disruption of operations/ activities in area of release.</p> <p><u>Off-site:</u></p> <p>No effect</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 800 ft. (radial distance from release point). 2) Account for personnel in evacuated area or building. 3) Make a hazardous materials response. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. 7) Identify exposed and/or injured persons for medical evaluation. <p>No off-site protective action recommendations required.</p>
7.2	<p>Supply line leakage in C-350</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 800 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 3 ppm HF or ≥ 1 ppm Cl₂ or ≥ 2 ppm F₂ at a distance of 800 ft. downwind.</p> <p>(Additional ClF₃ EALs on next page)</p>	ALERT		

HAZARDOUS CHEMICAL EVENT – CHLORINE TRIFLUORIDE (ClF₃), (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
7.3	<p>Pipeline rupture in line,</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 800 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 3 ppm HF or ≥ 1 ppm Cl₂ or ≥ 2 ppm F₂ at a distance of 1100 ft. downwind.</p>	ALERT	<p><u>On-site:</u></p> <p>ClF₃ ERPG-2 exposure levels (1 ppm) in immediate release area.</p> <p>ClF₃ Hydrolysis products (HF and Cl₂).</p> <p>Disruption of operations/ activities in area of release.</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 800 ft. (radial distance from release point). 2) Account for personnel in evacuated area or building. 3) Make a hazardous materials response. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind.
7.4	<p>Storage tank rupture in C-350</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 1100 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 3 ppm HF or ≥ 1 ppm Cl₂ or ≥ 2 ppm F₂ at a distance of 1100 ft. downwind.</p> <p>(Additional ClF₃ EALs on next page)</p>	ALERT	<p><u>Off-site:</u></p> <p>No effect</p>	<ol style="list-style-type: none"> 6) Notify off-site authorities. 7) Identify exposed and/or injured persons for medical evaluation. <p>No off-site protective action recommendations required.</p>

HAZARDOUS CHEMICAL EVENT – CHLORINE (Cl₂)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
8.0	Chlorine (Cl₂)			
8.1	<p>Cylinder valve or pigtail leakage/rupture occurring anywhere on-site.</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 600 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 1 ppm Cl₂ at a distance of 600 ft. downwind.</p>	ALERT	<p><u>On-site:</u></p> <p>ERPG-2 exposure levels (3 ppm) in immediate release area.</p> <p>Disruption of operations/ activities in area of release.</p> <p><u>Off-site:</u></p> <p>No effect</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 600 ft. (radial distance from release point). 2) Account for personnel in evacuated area or building. 3) Make a hazardous materials response. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. 7) Identify exposed and/or injured persons for medical evaluation. <p>No off-site protective action recommendations required.</p>
8.2	<p>Damaged (not ruptured) 150 lb cylinder, releasing contents,</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 600 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 1 ppm Cl₂ at a distance of 600 ft. downwind.</p> <p>(Additional Cl₂ EALs on next page)</p>	ALERT		

HAZARDOUS CHEMICAL EVENT – CHLORINE (Cl₂) (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
8.3	<p>Rupture of a <u>150 lb</u> cylinder inside the <u>C-615</u> sewage plant,</p> <p style="text-align: center;">AND</p> <p>Plume is visible at a distance of 900 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>Release is confirmed by a detectable level of ≥ 1 ppm Cl₁, at a distance of 900 ft. downwind.</p>	ALERT	<p><u>On-site:</u></p> <p>ERPG-2 exposure levels (3 ppm) in immediate release area.</p> <p>Disruption of operations/ activities in area of release.</p> <p><u>Off-site:</u></p> <p>No effect</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 600 ft. (radial distance from release point). 2) Account for personnel in evacuated area or building. 3) Make a hazardous materials response. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. 7) Identify exposed and/or injured persons for medical evaluation. <p>No off-site protective action recommendations required.</p>
8.4	<p>Damaged (not ruptured) 1-ton cylinder, releasing contents,</p> <p style="text-align: center;">AND</p> <p>Plume is visible at a distance of 900 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>Release is confirmed by a detectable level of ≥ 1 ppm Cl₂, at a distance of 600 ft. downwind.</p> <p>(Additional Cl₂ EALs on next page)</p>	ALERT		

HAZARDOUS CHEMICAL EVENT – CHLORINE (Cl₂) (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
8.5	Rupture of a <u>150 lb</u> cylinder <u>outside</u> .	SITE AREA EMERGENCY	<p><u>On-site:</u></p> <p>Cl₂ Concentration exceeding ERPG-2 levels (3 ppm) in immediate release area.</p> <p>Disruption of operations/ activities in large portion of plant.</p> <p><u>Off-site:</u></p> <p>>ERPG-2 exposures beyond site boundary</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 600 ft. (radial distance from release point). 2) Evacuate downwind areas and/or buildings to the site boundary (reservation boundary) or shelter-in-place if evacuation cannot be performed in a safe and timely manner. 3) Account for personnel in evacuated area and/or building(s). 4) Activate the Public Warning System including sirens and the EAS. 5) Issue required notifications and protective action recommendations (PARs). 6) Activate EOC. 7) Make a hazardous materials response.
8.6	Rupture of a 1-ton cylinder, occurring anywhere on-site.	SITE AREA EMERGENCY		<ol style="list-style-type: none"> 8) Identify exposed and/or injured persons for medical evaluation. <p>Off-site protective action recommendations and Public Warning Siren activation are required.</p>

HAZARDOUS CHEMICAL EVENT – HYDROCHLORIC ACID (HCl)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
9.0	Hydrochloric Acid (HCl)			
9.1	<p>Transfer line leak or rupture in C-400,</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 330 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 5 ppm HCl, at a distance of 330 ft. downwind.</p>	ALERT	<p><u>On-site:</u></p> <p>ERPG-2 exposure levels (20 ppm) in immediate release area.</p> <p>Disruption of operations/ activities in area of release.</p> <p><u>Off-site:</u></p> <p>No effect</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 330 ft. (radial distance from release point). 2) Account for personnel in evacuated area or building. 3) Make a hazardous materials response. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. <p>No off-site protective action recommendations required.</p>
9.2	<p>Tank rupture in C-400,</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 330 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 5 ppm HCl, at a distance of 330 ft. downwind.</p>	ALERT		

HAZARDOUS CHEMICAL EVENT – NITRIC ACID (HNO₃)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
10.0	Nitric Acid (HNO₃)			
10.1	<p>Receiving operation leak during temporary connection to tank truck,</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 500 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 4 ppm HNO₃, at a distance of 1300 ft. downwind.</p>	ALERT	<p><u>On-site:</u></p> <p>ERPG-2 exposure levels (6 ppm) in immediate release area.</p> <p>Disruption of operations/ activities in area of release.</p> <p><u>Off-site:</u></p> <p>No effect</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 500 ft. (radial distance from release point). 2) Account for personnel in evacuated area or building. 3) Make a hazardous materials response. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. <p>No off-site protective action recommendations required.</p>
10.2	<p>Pump housing failure in diked area of C-400,</p> <p style="text-align: center;">OR</p> <p>leak or rupture of transfer piping to day tank.</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 500 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 4 ppm HNO₃ at a distance of 1300 ft. downwind.</p> <p>(Additional HNO₃ EALs on next page)</p>	ALERT		

HAZARDOUS CHEMICAL EVENT – NITRIC ACID (HNO₃) (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
10.3	<p>Rupture of storage tank in C-400 (500 gallon tank) or in C-409</p> <p style="text-align: center;">AND</p> <p>Plume is visible at a distance of 1300 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>Release is confirmed by a detectable level of ≥ 4 ppm HNO₃ at a distance of 1300 ft. downwind.</p>	ALERT	<p><u>On-site:</u></p> <p>ERPG-2 exposure levels (6 ppm) in immediate release area.</p> <p>Disruption of operations/ activities in area of release.</p> <p><u>Off-site:</u></p> <p>No effect</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 500 ft. (radial distance from release point). 2) Account for personnel in evacuated area or building. 3) Make a hazardous materials response. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. <p>No off-site protective action recommendations required.</p>

HAZARDOUS CHEMICAL EVENT – NITRIC ACID (HNO₃) (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
10.4	Rupture of above ground storage tank (11,000 gallon tank) at C-400.	SITE AREA EMERGENCY	<p><u>On-site:</u></p> <p>HNO₃ concentration exceeding ERPG-2 (6 ppm) exposure levels in release area and downwind to site boundary.</p> <p>Disruption of operations/ activities in large portion of plant.</p> <p><u>Off-site:</u></p> <p>>ERPG-2 exposures beyond site boundary</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 1300 ft. (radial distance from release point). 2) Evacuate downwind areas/buildings to the site boundary (reservation boundary) or shelter-in-place if evacuation cannot be performed in a safe and timely manner. 3) Account for personnel in evacuated area and/or building(s). 4) Activate the Public Warning System including sirens and the EAS. 5) Issue required notifications and protective action recommendations (PARs). 6) Activate EOC. 7) Make a hazardous materials response. 8) Identify exposed and/or injured persons for medical evaluation. <p>Off-site protective action recommendations and Public Warning System activation are required.</p>

HAZARDOUS CHEMICAL EVENT – URANIUM HEXAFLUORIDE (UF₆)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
11.0	Uranium HEXAFLUORIDE (UF₆)			
11.1	<p>Ruptured transfer or process piping,</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 500 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 3 ppm HF at a distance of 400 ft. downwind.</p>	ALERT	<p><u>On-site:</u></p> <p>HF concentration exceeding ERPG-2 (20 ppm) in immediate release area.</p> <p>Potential for uptake of Uranium in affected area.</p> <p>Disruption of operations/ activities in area of release.</p> <p><u>Off-site:</u></p> <p>No effect</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 500 ft. (radial distance from release point). 2) Account for personnel in evacuated area or building. 3) Make a hazardous materials response. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. 7) Identify exposed and/or injured persons for medical evaluation and for bioassay-contact the Radiological Protection Manager (RPM).
11.2	<p>Damaged or ruptured liquid cylinder valve or pigtail,</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 500 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 3 ppm HF at a distance of 400 ft. downwind.</p> <p>(Additional UF₆ EALs on next page)</p>	ALERT		<p>No off-site protective action recommendations required.</p>

HAZARDOUS CHEMICAL EVENT – URANIUM HEXAFLUORIDE (UF₆) (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
11.3	<p>Cell overheat and rupture,</p> <p style="text-align: center;">OR</p> <p>other significant process operation failure resulting in a release,</p> <p style="text-align: center;">AND</p> <p>plume is visible at a distance of 400 ft. downwind,</p> <p style="text-align: center;">OR</p> <p>release is confirmed by a detectable level of ≥ 3 ppm HF, at a distance of 400 ft. downwind.</p>	ALERT	<p><u>On-site:</u></p> <p>HF concentration exceeding ERPG-2 (20 ppm) in immediate release area.</p> <p>Potential for uptake of Uranium in affected area.</p> <p>Disruption of operations/ activities in area of release.</p> <p><u>Off-site:</u></p> <p>No effect</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 500 ft. (radial distance from release point). 2) Account for personnel in evacuated area and/or building. 3) Make a hazardous materials response. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind. 6) Notify off-site authorities. 7) Identify exposed persons for medical evaluation and for bioassay - Contact the RPM. <p>No off-site protective action recommendations required.</p>
11.4	<p>Rupture of a liquid cylinder occurring anywhere on-site.</p> <p>(Includes 2 ½ ton, 10 ton, and 14 ton capabilities) occurring anywhere on-site.</p> <p>(Additional UF₆ EALs on next page)</p>	SITE AREA EMERGENCY	<p><u>On-site:</u></p> <p>HF concentration exceeding ERPG-2 (20 ppm) exposure levels in release area and downwind to site boundary.</p> <p>Potential for uptake of Uranium in affected area.</p> <p>Disruption of operations/ activities in large portion of plan.</p> <p><u>Off-site:</u></p> <p>>ERPG-2 exposures beyond site boundary.</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 500 ft. (radial distance from release point). 2) Evacuate downwind areas/buildings to the site boundary (reservation boundary) or shelter-in-place if evacuation cannot be performed in a safe and timely manner. 3) Account for personnel in evacuated area and/or building(s). 4) Activate the Public Warning System including sirens and the EAS. 5) Issue required notifications and PARs. 6) Activate EOC. 7) Make a hazardous materials response. 8) Identify exposed persons for medical evaluation and for bioassay - Contact the RPM. <p>Off-site protective action recommendations and Public Warning System activation are required.</p>

HAZARDOUS CHEMICAL EVENT – URANIUM HEXAFLUORIDE (UF₆) (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
11.5	Accumulator failure in C-310 or C-315 verified by a significant initiating event.	SITE AREA EMERGENCY	<p><u>On-site:</u></p> <p>HF concentration exceeding ERPG-2 (20 ppm) exposure levels in release area and downwind to site boundary.</p> <p>Potential for uptake of Uranium in affected area.</p> <p>Disruption of operations/ activities in large portion of plant.</p> <p><u>Off-site:</u></p> <p>>ERPG-2 exposures beyond site boundary</p>	<p>1) Establish an initial isolation zone for the affected area or building to 500 ft. (radial distance from release point).</p> <p>2) Evacuate downwind areas/buildings to the site boundary (reservation boundary) or shelter-in-place if evacuation cannot be performed in a safe and timely manner.</p> <p>3) Account for personnel in evacuated area and/or building(s).</p> <p>4) Activate the Public Warning System including sirens and the EAS.</p> <p>5) Issue required notifications and PARs.</p> <p>6) Activate EOC.</p> <p>7) Make a hazardous materials response.</p> <p>8) Identify exposed persons for medical evaluation and for bioassay - Contact the RPM.</p> <p>Off-site protective action recommendations and Public Warning System activation are required.</p>

RADIOLOGICAL EVENT

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
12.0	Radiological Event			
	<p>Nuclear criticality occurring anywhere on-site.</p> <p>Note: Based on the site hazard analysis, a credible scenario for a criticality with off-site effects does not exist.</p>	ALERT	<p><u>On-site:</u></p> <p>Above normal to lethal radiation levels in area of criticality.</p> <p>Disruption of operations and/or activities in area of release.</p> <p><u>Off-site:</u></p> <p>No effect.</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building to 200 ft. (assembly points). 2) Account for personnel in evacuated area and/or building(s). 3) Make a criticality accident response according to CP2-EP-EP5038. 4) Activate EOC. 5) Consider evacuation of a larger area. 6) Consider the possibility of a fission product release. 7) Identify exposed and/or injured persons for medical evaluation and for bioassay - Contact RPM. 8) Notify off-site authorities. <p>No off-site protective action recommendations required.</p>

OTHER ADVERSE EVENT

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
13.0	Other Adverse Event			
13.1	<p>Other adverse event either on-site or off-site, potentially compromising any system and/or process and/or equipment described in the hazardous chemical EALs or radiological EAL, and if breached has the potential to result in reaching a radiological or hazardous chemical ALERT level</p> <p style="text-align: center;">BUT IS NOT</p> <p>capable of releasing radiological or non-radiological hazardous material exceeding ERPG-2 exposure levels off-site.</p> <p>Examples: Aircraft incident, vehicle crash, chemical release from an off-site source affecting plant operations.</p>	ALERT	<p><u>On-site:</u></p> <p>Potential for injury to personnel.</p> <p>Potential for fire and/or explosion.</p> <p>Potential for ERPG-2 exposure levels for involved hazardous material in immediate release area.</p> <p>Potential for uptake of uranium in affected area.</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the compromised area or building. 2) Account for personnel in the evacuated area or building. 3) When safe, make an appropriate emergency response based on the hazards and/or conditions involved. 4) Activate EOC. 5) Consider precautionary evacuation or shelter-in-place of areas or buildings immediately downwind of any chemical and/or radiological release. 6) Notify off-site authorities. 7) Consider the need for off-site assistance. 8) Identify exposed persons for medical evaluation and for bioassay, if necessary - contact RPM. <p>No off-site protective action recommendations required.</p>
13.2	<p>PSS as crisis manager or crisis manager may declare at his/her discretion an ALERT to address major operational concerns or major multiple emergency scenes.</p> <p>Note: Refer to the radiological EAL or to the appropriate hazardous chemical EAL for specific system, process, and material information.</p>		<p>Disruption of operations and/or activities in affected area of release.</p> <p><u>Off-site:</u></p> <p>No effect.</p>	

OTHER ADVERSE EVENT (Continued)

Emergency Action Level		Event Classification	Anticipated Consequences	Anticipated Responses and Protective Actions
13.0	Other Adverse Event			
13.3	<p>Other adverse event either on-site or off-site, potentially or actually, compromising any system and/or process and/or equipment that may result in a radiological or non-radiological hazardous material release which has the potential for</p> <p style="text-align: center;">EQUAL TO OR GREATER THAN</p> <p>ERPG-2 exposure levels both on-site and off-site.</p> <p>Note: Refer to the radiological EAL or to the appropriate hazardous chemical EAL for specific system, process, and material information.</p>	SITE AREA EMERGENCY	<p><u>On-site:</u></p> <p>Potential for injury to personnel.</p> <p>Chemical concentration exceeding ERPG-2 exposure levels in release area and downwind from site boundary.</p> <p>Potential for uptake of uranium in affected area.</p> <p>Disruption of operations and/or activities in affected area of release.</p> <p><u>Off-site:</u></p> <p>>ERPG-2 exposures beyond site boundary.</p>	<ol style="list-style-type: none"> 1) Establish an initial isolation zone for the affected area or building for physical, chemical and/or radiological hazards. 2) Evacuate downwind areas/buildings to the site boundary (reservation boundary) or shelter-in-place if evacuation cannot be performed in a safe and timely manner. 3) Account for personnel in evacuated area and/or building(s). 4) When safe, make an appropriate emergency response based on the hazards and/or conditions involved. 5) Activate the Public Warning system including sirens and the EAS. 6) Issue required notifications to off-site authorities and PARs. 7) Activate EOC. 8) Stage emergency responders in a safe location. 9) Identify exposed persons for medical evaluation and for bioassay, if necessary - contact RPM. 10) Consider the need for off-site assistance. <p>Off-site protective action recommendations and Public Warning Siren activation are required.</p>

TAB X-1-2
PGDP EMERGENCY NOTIFICATION FORM
PGDP EMERGENCY NOTIFICATION FORM

This is the Paducah Gaseous Diffusion Plant, located on Hobbs Road, with: *(check one)* ☐ an **EMERGENCY** notification
(Repeat Line) ☐ a **DRILL** notification

*1. This is Emergency Notification Number _____. Date: _____ Time _____
(TIME NOTIFICATION APPROVED)

*2. Paducah Plant Communicator Name: _____ Phone Number: _____
(PRINT)

*3. Emergency Classification: a. ☐ ALERT Time Emergency Class Declared/Terminated: _____
(check one) b. ☐ SITE AREA
c. ☐ Terminate

*4. **OFF SITE** Protective Actions Recommended: a. ☐ No protective action recommended at this time.
(check one) b. ☐ Off-site sheltering recommended within the 2-mile Immediate Notification Area
c. ☐ Other: _____

*5. PWS Outdoor Sirens: *(check one)* a. ☐ have not been activated.
b. ☐ have been activated. Time sirens activated: _____
(Activation required for all Site Area Emergencies)

*6. PWS EAS Message Played: *(check one)* a. ☐ Message 1, Test/Drill Time WKYQ-FM notified (554-8686): _____
b. ☐ Message 2, Sheltering Required Time NWS/NOAA notified (744-8029): _____
c. ☐ Message 3, Inadvertent Siren Activation
d. ☐ Message 4, Termination of Off-Site Protective Actions
e. ☐ Message 5, Optional: _____
f. ☐ No Message Required.

*7. Release Information: *(check one)* a. ☐ No release has occurred, and **NO** potential for release exists
b. ☐ No release has occurred, and **POTENTIAL** for release exists
c. ☐ Release is occurring: *(circle one)* on-site only / off-site
d. ☐ Release occurred, but has stopped

*8. Material Released: _____

9. Type of Release: *(check one)* a. ☐ Surface b. ☐ Water c. ☐ Air d. ☐ Other: _____

10. Estimate of Release Quantity: _____ Time/Duration of Release: _____

11. Meteorological Conditions at PGDP: Wind is from the _____ (N, SW, ESE, etc.) at _____ mph. Stability Class is _____

12. Event Description: _____

13. Emergency Condition: *(check one)* a. ☐ Improving b. ☐ Stable c. ☐ Degrading d. ☐ Undetermined

14. Plant Status: *(check one)* a. ☐ Operating b. ☐ Shutdown c. ☐ Being Shutdown

*15. Emergency Notification Approved by: _____ Title: _____ Date/Time: _____ / _____

* Items to be completed for immediate emergency notifications.

Check Organization Notified:		
1. <input type="checkbox"/> Paducah-McCracken County Office of Emergency Mangement (Local EOC): OEM ringdown phone, 911 Or 442-6381	Time _____	_____ (Person Contacted)
2. <input type="checkbox"/> Kentucky Division of Emergency Management (State EOC): 1-800-255-2587	Time _____	_____ (Person Contacted)
3. <input type="checkbox"/> DOE Oak Ridge Operations EOC, after state and local notifications: 865-576-1005	Time _____	_____ (Person Contacted)
4. <input type="checkbox"/> NRC Operations Center, immediately after state and local notifications, but no later than 1 hour after emergency classification. 301-816-5100 or 301-951-0550	Time _____	_____ (Person Contacted)
5. <input type="checkbox"/> USEC-HQ: Use call list in Off-Site Communicator's book.	Time _____	_____ (Person Contacted)

TAB X-1-3
IMMEDIATE NOTIFICATION AREAS

Map of PGDP Immediate Notification Area

